Meeting of the Central Valley Flood Protection Board October 28, 2010

Staff Report – Encroachment Permit

California Department of Water Resources Slurry Wall, San Joaquin County

<u>1.0 – ITEM</u>

Consider approval of Permit No. 18621 (see Attachment B)

2.0 – APPLICANT

California Department of Water Resources, Division of Flood Management, Levee Repairs Branch.

3.0 - LOCATION

The project is located in Stockton just south of Highway 4 and west of McCloud River Road. (San Joaquin River, San Joaquin County, see Attachment A)

4.0 - DESCRIPTION

The applicant proposes to construct a 2.5-foot-wide, 1,200-foot-long, 45-foot-deep cement-bentonite slurry wall on the crown of the right (north) bank levee (River Mile 42.3) of the San Joaquin River.

5.0 - PROJECT ANALYSIS

The proposed project site was identified as a *critical erosion site* in 2007. Emergency waterside erosion repairs were designed and constructed in 2008. Repairs included about 550 feet of rock slope protection, as well as a riparian bench and on-site environmental mitigation (plantings of trees, cuttings, and fascine bundles). However seepage and levee stability issues were not considered in these repairs.

Through ongoing levee investigations in 2008, the Levee Evaluations Branch of the Division of Flood Management identified River Mile 42.3 on the right bank of the San Joaquin River as a *critical seepage area*. Historically, a sand boil was noted at this site in 1997 but no repairs were done to eradicate the seepage problem. The proposed cement-bentonite slurry wall will penetrate the levee at the midpoint of the levee crown

and tie into a low permeability clay layer at approximately 40-feet in depth. The slurry wall will improve the reliability of the flood control system in this area.

The Department of Water Resources proposes to construct the slurry wall and Reclamation District 404 has agreed to maintain the slurry wall and the project works following completion of the project (see Attachment C for Operations & Maintenance Agreement between the CVFPB and RD 404).

5.1 – Hydraulic Analysis

The proposed project will not change channel geometry and the levee crown will be restored to pre-project conditions. No hydraulic analysis is required for the project.

5.2 – Geotechnical Analysis

Under-seepage and boils were observed at the project site during the high water events of 1997, 1998, and 2006. Exploratory geotechnical borings in 2008 and 2010 documented subsurface conditions that are causing the under-seepage within the project area. These assessments, coupled with the history of seepage and boils on the landside of the levee, underscore the need for immediate remediation to prevent potential levee failure. The proposed slurry wall will address the identified seepage problem in the project area.

<u>6.0 – AGENCY COMMENTS AND ENDORSEMENTS</u>

The comments and endorsements associated with this project, from all pertinent agencies are shown below:

- The U.S. Army Corps of Engineers 208.10 comment letter has not yet been received for this application. Upon receipt of a favorable letter and review by Board staff it will be incorporated into the permit as Exhibit A.
- Reclamation District 404 has endorsed this project with no conditions.

7.0 - CEQA ANALYSIS

Board staff has prepared the following CEQA Findings:

The Board, as a responsible agency under CEQA, has reviewed Initial Study/Mitigated Negative Declaration (IS/MND) (SCH Number: 2010062074, June 2009) and Mitigation Monitoring and Reporting Program for the Seepage Repair at Reclamation District 404, San Joaquin River, River Mile 42.1 to 42.3 Right Bank Project, prepared by the lead agency, the Department of Water Resources. These documents, including project design, may be viewed or downloaded from the Central Valley Flood Protection Board

website at http://www.cvfpb.ca.gov/meetings/2010/10-28-29-2010agenda.cfm under a link for this agenda item. These documents are also available for review in hard copy at the Board and San Joaquin County library.

The Department of Water Resources has determined that the project would not have a significant effect on the environment and filed a Notice of Determination on August 12, 2010 with the State Clearinghouse. Board staff finds that although the proposed project could have a potentially significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. The project proponent has incorporated mandatory mitigation measures into the project plans to avoid identified impacts or to mitigate such impacts to a point where no significant impacts will occur. These mitigation measures are included in the project proponent's Mitigation Monitoring and Reporting Program and address impacts to air quality, biological resources, cultural resources, geology and soils, hazards, hydrology and water quality, and noise. The description of the mitigation measures are further described in the adopted Mitigation Monitoring and Reporting Program.

8.0 - SECTION 8610.5 CONSIDERATIONS

1. Evidence that the Board admits into its record from any party, State or local public agency, or nongovernmental organization with expertise in flood or flood plain management:

The Board will make its decision based on the evidence in the permit application and attachments, this staff report, and any other evidence presented by any individual or group.

2. The best available science that related to the scientific issues presented by the executive officer, legal counsel, the Department or other parties that raise credible scientific issues.

The accepted industry standards for the work proposed under this permit as regulated by Title 23 have been applied to the review of this permit.

3. Effects of the decision on the entire State Plan of Flood Control:

The proposed project will improve the State Plan of Flood Control by controlling seepage through the levee.

4. Effects of reasonable projected future events, including, but not limited to, changes in hydrology, climate, and development within the applicable watershed:

There will be no effects from projected future events on the proposed slurry wall.

9.0 – STAFF RECOMMENDATION

Staff recommends that the Board adopt the CEQA findings, approve the permit conditioned upon receipt of a favorable U.S. Army Corps of Engineers comment letter and direct staff to file a Notice of Determination with the State Clearinghouse.

10.0 - LIST OF ATTACHMENTS

- A. Location Maps and Photos
- B. Draft Permit No. 18621
- C. Operation & Maintenance Agreement between CVFPB and RD-404

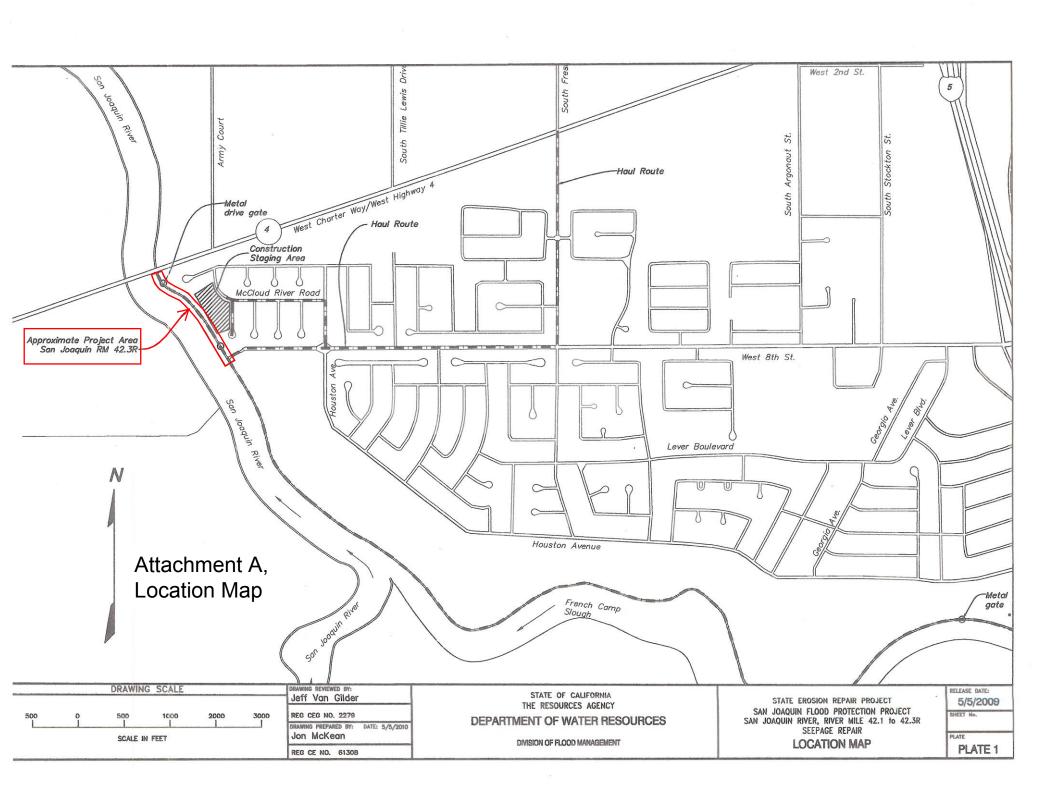
Design Review: Steve Dawson / Jon Tice, P.E.

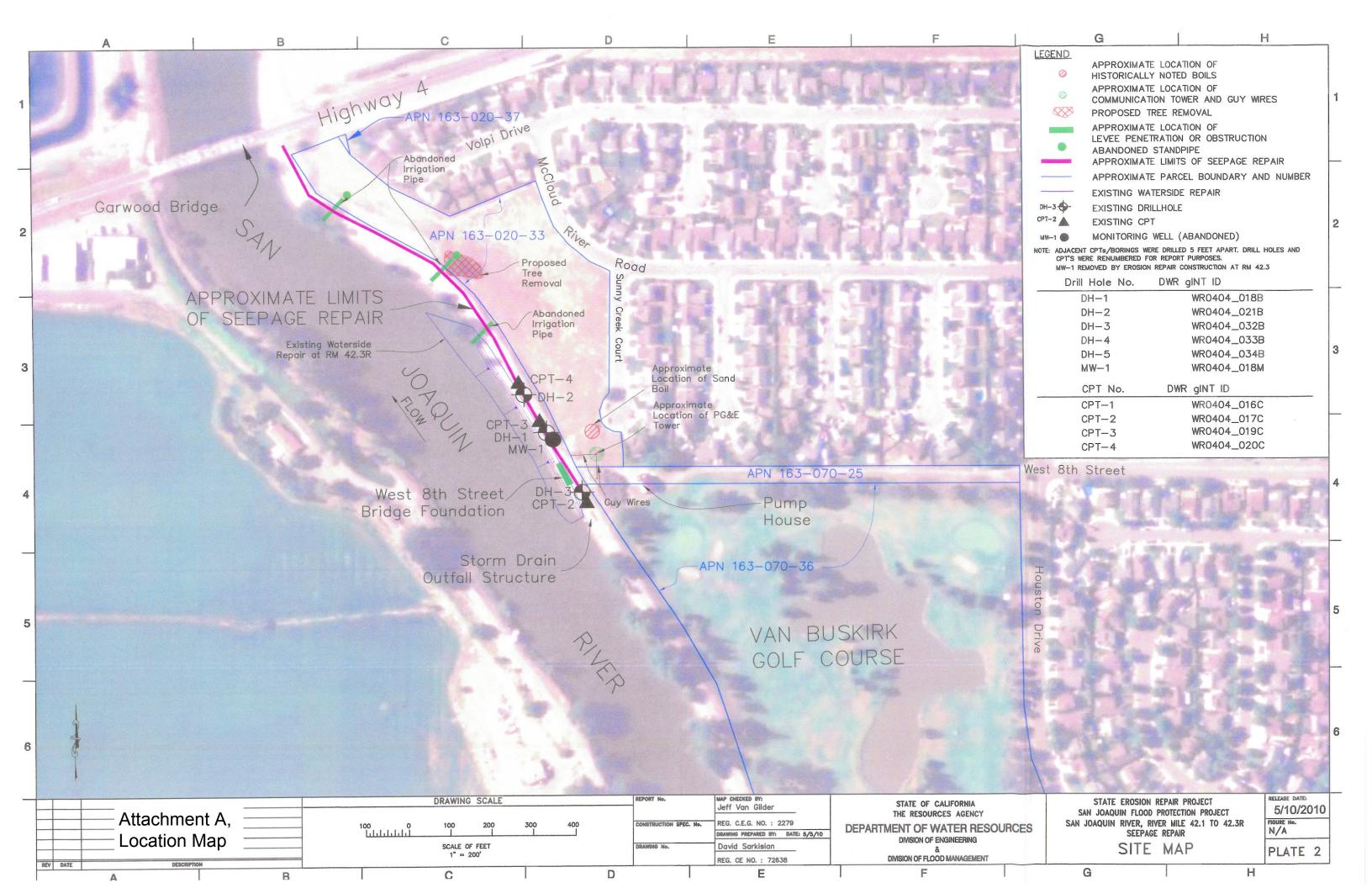
Environmental Review: James Herota

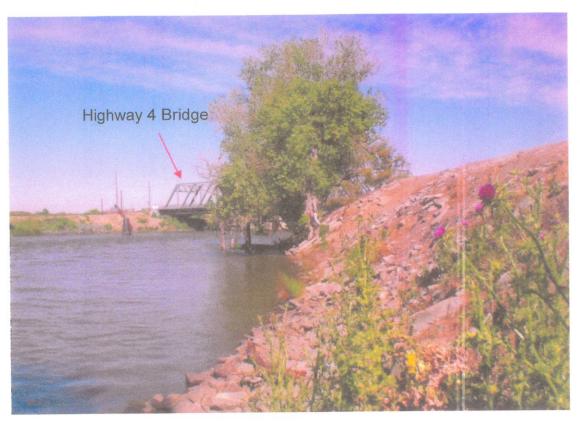
Document Review: Gary Lemon P.E. and Len Marino P.E.

Regional Map





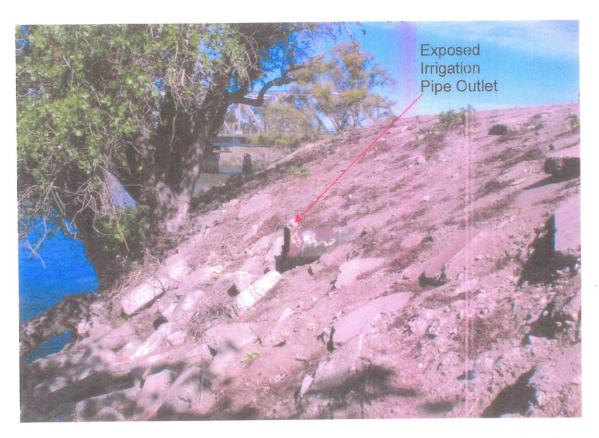




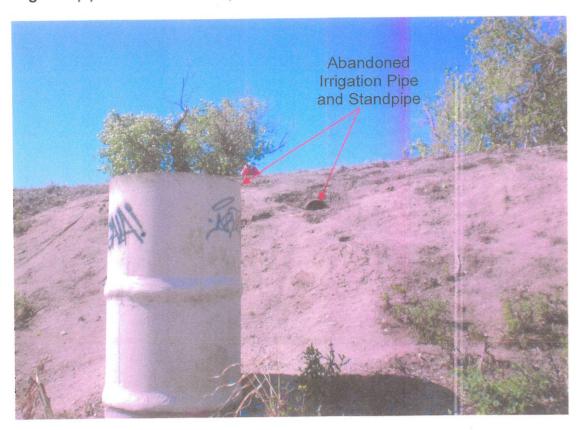
Photograph 1 - View downstream along levee at SJR RM 42.2R, depicting typical waterside slope.



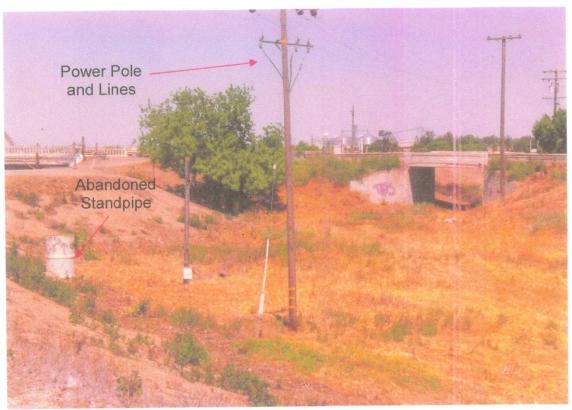
Photograph 2 - View downstream from SJR RM 42.3R, depicting typical water-side erosion repair.



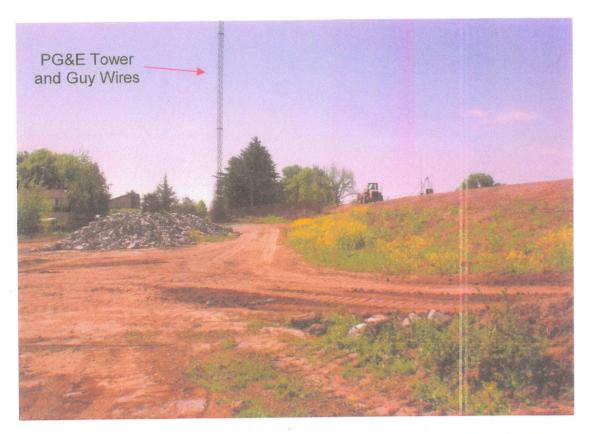
Photograph 3 - View downstream from SJR RM 42.3R, showing abandoned irrigation pipe on waterside slope.



Photograph 4 – View westward on landside levee slope at SJR RM 42.2R, showing abandoned irrigation pipe and concrete standpipe.



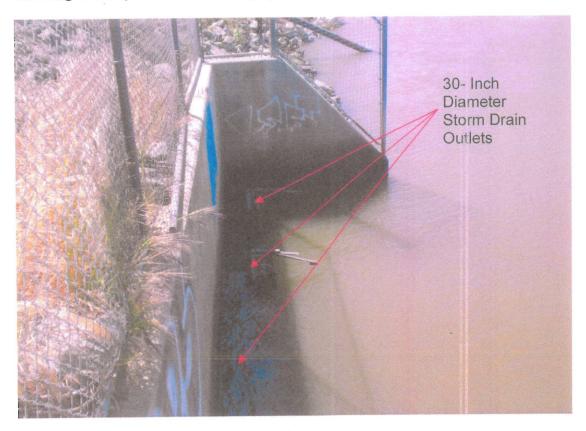
Photograph 5 – View northward on landside levee slope at SJR RM 42.1R, showing power pole near north end of proposed seepage repair site.



Photograph 6 – View southward on landside levee slope at SJR RM 42.2R, Showing proposed construction staging area and PG&E tower/guy wires.



Photograph 7 – View northward on landside levee slope at SJR RM 42.2R, showing closeup of PG&E tower/guy wires.



Photograph 8 – View southward on waterside levee slope at SJR RM 42.3R, Showing storm drain outlet structure.



Photograph 9 – View southward on waterside levee slope at SJR RM 42.3R, showing storm drain outlet structure siphon breakers.



Photograph 10 - View eastward on landside at SJR RM 42.3R, showing the West Eighth Street Pump Station.

DRAFT

STATE OF CALIFORNIA THE RESOURCES AGENCY

THE CENTRAL VALLEY FLOOD PROTECTION BOARD

PERMIT NO. 18621 BD

This Permit is issued to:

Department of Water Resources - Levee Repairs 3464 El Camino Avenue, Suite 200 Sacramento, California 95821-6310

To construct a 2.5-foot-wide, 1,200-foot-long, 45-foot-deep cement-bentonite slurry wall on the crown of the right (north) bank levee (River Mile 42.3) of the San Joaquin River. The project is located in Stockton just south of Highway 4 and west of McCloud River Road (Section 16&21, T1N, R6E, MDB&M, Reclamation District 404 and SJCFC&WCD, San Joaquin River, San Joaquin County).

NOTE: Special Conditions have been incorporated herein which may place limitations on and/or require modification of your proposed project as described above.

(SEAL)

Dated:	
	Executive Officer

GENERAL CONDITIONS:

ONE: This permit is issued under the provisions of Sections 8700 – 8723 of the Water Code.

TWO: Only work described in the subject application is authorized hereby.

THREE: This permit does not grant a right to use or construct works on land owned by the Sacramento and San Joaquin Drainage District or on any other land.

FOUR: The approved work shall be accomplished under the direction and supervision of the State Department of Water Resources, and the permittee shall conform to all requirements of the Department and The Central Valley Flood Protection Board.

FIVE: Unless the work herein contemplated shall have been commenced within one year after issuance of this permit, the Board reserves the right to change any conditions in this permit as may be consistent with current flood control standards and policies of The Central Valley Flood Protection Board.

SIX: This permit shall remain in effect until revoked. In the event any conditions in this permit are not complied with, it may be revoked on 15 days' notice.

SEVEN: It is understood and agreed to by the permittee that the start of any work under this permit shall constitute an acceptance of the conditions in this permit and an agreement to perform work in accordance therewith.

EIGHT: This permit does not establish any precedent with respect to any other application received by The Central Valley Flood Protection Board.

NINE: The permittee shall, when required by law, secure the written order or consent from all other public agencies having jurisdiction.

TEN: The permittee is responsible for all personal liability and property damage which may arise out of failure on the permittee's part to perform the obligations under this permit. If any claim of liability is made against the State of California, or any departments thereof, the United States of America, a local district or other maintaining agencies and the officers, agents or employees thereof, the permittee shall defend and shall hold each of them harmless from each claim.

ELEVEN: The permittee shall exercise reasonable care to operate and maintain any work authorized herein to preclude injury to or damage to any works necessary to any plan of flood control adopted by the Board or the Legislature, or interfere with the successful execution, functioning or operation of any plan of flood control adopted by the Board or the Legislature.

TWELVE: Should any of the work not conform to the conditions of this permit, the permittee, upon order of The Central Valley Flood Protection Board, shall in the manner prescribed by the Board be responsible for the cost and expense to remove, alter, relocate, or reconstruct all or any part of the work herein approved.

SPECIAL CONDITIONS FOR PERMIT NO. 18621 BD

THIRTEEN: All technical addendums or other changes made to the submitted documents by the permittee after issuance of this permit are subject to submittal and review for approval by the Central Valley Flood Protection Board staff prior to incorporation into the permitted project. Upon review and approval of any new submitted documents the permit shall be revised, if needed, prior to construction related to the proposed changes. The Central Valley Flood Protection Board staff shall have up to 90 days after receipt of any documents, plans, drawings, and specifications for the review process. The Central Valley Flood Protection Board staff may extend this review period by written notification.

FOURTEEN: All work approved by this permit shall be in accordance with the submitted drawings and specifications except as modified by special permit conditions herein. No further work, other than that approved by this permit, shall be done in the area without prior approval of the Central Valley Flood Protection Board.

FIFTEEN: The permittee is responsible for all liability associated with construction, operation, and maintenance of the permitted facilities and shall defend, indemnify, and hold the Central Valley Flood Protection Board and the State of California; including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages arising from the project undertaken pursuant to this permit, all to the extent allowed by law. The State expressly reserves the right to supplement or take over its defense, in its sole discretion

SIXTEEN: The permittee shall defend, indemnify, and hold the Central Valley Flood Protection Board and the State of California, including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages related to the Central Valley Flood Protection Board's approval of this permit, including but not limited to claims filed pursuant to the California Environmental Quality Act. The State expressly reserves the right to supplement or take over its

defense, in its sole discretion.

SEVENTEEN: The Central Valley Flood Protection Board and the Department of Water Resources shall not be held liable for any damages to the permitted encroachment(s) resulting from flood fight, operation, maintenance, inspection, or emergency repair.

EIGHTEEN: No construction work of any kind shall be done during the flood season from November 1st to July 15th without prior approval of the Central Valley Flood Protection Board.

NINETEEN: The permittee shall provide supervision and inspection services acceptable to the Central Valley Flood Protection Board. A professional engineer registered in the State of California shall certify that all work was inspected and performed in accordance with submitted drawings, specifications, and permit conditions.

TWENTY: If FEMA certification of the levee by the Corps of Engineers is being considered, the project proponent should contact the U. S. Army Corps of Engineers regarding inspection of the project during construction for FEMA certification purposes.

TWENTY-ONE: The permittee shall contact the Department of Water Resources by telephone, (916) 574-0609, and submit the enclosed postcard to schedule a preconstruction conference. Failure to do so at least 10 working days prior to start of work may result in delay of the project.

TWENTY-TWO: Prior to commencement of excavation, the permittee shall create a photo record, including associated descriptions, of the levee conditions. The photo record shall be certified (signed and stamped) by a licensed land surveyor or professional engineer registered in the State of California and submitted to the Central Valley Flood Protection Board within 30 days of beginning the project.

TWENTY-THREE: Upon completion of the project, the permittee shall perform a levee crown profile survey and create a photo record including associated descriptions, of "as-built" levee conditions. The levee crown profile survey and photo record shall be certified (signed and stamped) by a licensed land surveyor or a professional engineer registered in the State of California and submitted to the Central Valley Flood Protection Board within 120 days of project completion.

TWENTY-FOUR: The permittee shall be responsible for repair of any damages to the project levee and other flood control facilities due to construction, operation, or maintenance of the proposed project.

TWENTY-FIVE: The permittee shall contact the U. S. Army Corps of Engineers regarding inspection of the project during construction as the proposed work is an alteration to the existing Federal Flood Control Project that will be incorporated into the Lower San Joaquin River and Tributaries Project, an adopted plan of flood control.

TWENTY-SIX: The permittee should contact the U.S. Army Corps of Engineers, Sacramento District, Regulatory Branch, 1325 J Street, Sacramento, California 95814, telephone (916) 557-5250, as compliance with Section 10 of the Rivers and Harbors Act and/or Section 404 of the Clean Water Act may be required.

TWENTY-SEVEN: The permittee shall cooperate with the Board to ensure that any encroachment that must be relocated, modified or otherwise altered to accommodate construction of the improvements permitted herein is relocated, modified or otherwise altered in a manner that complies with current applicable state and federal standards. If the affected encroachment has an existing Board permit or is subject to some other applicable Board authorization, the permittee shall cooperate with the Board to ensure the permit or other authorization is appropriately amended to reflect the changed condition as shown on as-built drawings for the encroachment and the overall project. If the encroachment does not have a Board permit or other Board authorization, the permittee shall cooperate with the Board to determine whether a Board permit is required. If so, permittee shall cooperate with the Board to ensure that the required permit application is made and, if granted, the permit reflects the changed condition as shown on as-built drawings for the encroachment and the overall project.

TWENTY-EIGHT: During construction of the project, any and all anticipated or unanticipated conditions encountered which may impact levee integrity or flood control shall be brought to the attention of the Flood Project Inspector immediately and prior to continuation. Any encountered abandoned encroachments shall be completely removed or properly abandoned under the direction of the Department of Water Resources Inspector.

TWENTY-NINE: The stability of the levee shall be maintained at all times during construction.

THIRTY: The permittee shall be responsible for all damages due to settlement, consolidation, or heave from any construction-induced activities.

THIRTY-ONE: All fencing, gates and signs removed during construction of this project shall be replaced in kind and at the original locations. If it is necessary to relocate any fence, gate or sign, the permittee is required to obtain written approval from the Central Valley Flood Protection Board prior to installation at a new location.

THIRTY-TWO: All temporary fencing, gates and signs shall be removed upon completion of the project.

THIRTY-THREE: Cleared trees and brush shall be completely burned or removed from the floodway, and downed trees or brush shall not remain in the floodway during the flood season from November 1st to July 15th.

THIRTY-FOUR: No material stockpiles, temporary buildings, or equipment shall remain in the floodway during the flood season from November 1st to July 15th.

THIRTY-FIVE: Excavations below the design flood plane and within the levee section or within 10 feet of the projected waterward and landward levee slopes shall have side slopes no steeper than 1 horizontal to 1 vertical. Flatter slopes may be required to ensure stability of the excavation.

THIRTY-SIX: Any pipe or conduit being reinstalled in the levee section and within ten (10) feet of both the waterward and landward levee toes shall meet Title 23 standards.

THIRTY-SEVEN: Fill on the levee slope shall be keyed into the existing levee section with each lift.

THIRTY-EIGHT: Backfill material for excavations within the levee section and within 10 feet of the levee toes shall be placed in 4- to 6-inch layers, moisture conditioned above optimum moisture content, and compacted to a minimum of 90 percent relative compaction as measured by ASTM Method D1557-91.

THIRTY-NINE: Density tests by a certified materials laboratory will be required to verify compaction of backfill within the levee section and within ten (10) feet of the levee toes.

FORTY: All fill material shall be imported impervious material with 20 percent or more passing the No. 200 sieve, a plasticity index of 8 or more, and a liquid limit of less than 50 and free of lumps or stones exceeding 3 inches in greatest dimension, vegetative matter, or other unsatisfactory material. Fill material shall be compacted in 4- to 6-inch layers to a minimum of 90 percent relative compaction as measured by ASTM Method D1557-91.

FORTY-ONE: Earthen material meeting the requirements of Condition Forty shall be used when developing the section, and no cuts shall remain in the levee section upon completion.

FORTY-TWO: The slopes of the reconstructed levee shall be no steeper than 3 horizontal to 1 vertical on the water side and 2 horizontal to 1 vertical on the land side.

FORTY-THREE: The reconstructed crown roadway and project access ramp(s) shall be surfaced with a minimum of 4 inches of compacted, Class 2, aggregate base (Caltrans Specification 26-1.02A).

FORTY-FOUR: Aggregate base material shall be compacted to a relative compaction of not less than 95 percent per ASTM Method D1557-91, with a moisture content sufficient to obtain the required compaction.

FORTY-FIVE: The project site shall be restored to at least the condition that existed prior to commencement of work.

FORTY-SIX: All debris generated by this project shall be disposed of outside the floodway and off the levee section.

FORTY-SEVEN: The permittee shall replant or reseed the levee slopes to restore sod, grass, or other non-woody ground covers if damaged during project work.

FORTY-EIGHT: The permitted encroachment(s) shall not interfere with operation and maintenance of the flood control project. If the permitted encroachment(s) are determined by any agency responsible for operation or maintenance of the flood control project to interfere, the permittee shall be required, at permittee's cost and expense, to modify or remove the permitted encroachment(s) under direction of the Central Valley Flood Protection Board or Department of Water Resources. If the permittee does not comply, the Central Valley Flood Protection Board may modify or remove the encroachment(s) at the permittee's expense.

FORTY-NINE: The permittee shall maintain the permitted encroachment(s) and the project works within the utilized area in the manner required and as requested by the authorized representative of the Department of Water Resources or any other agency responsible for maintenance.

FIFTY: The permittee may be required, at permittee's cost and expense, to remove, alter, relocate, or reconstruct all or any part of the permitted encroachment(s) if removal, alteration, relocation, or reconstruction is necessary as part of or in conjunction with any present or future flood control plan or project or if damaged by any cause. If the permittee does not comply, the Central Valley Flood Protection Board may remove the encroachment(s) at the permittee's expense.

FIFTY-ONE: If the project, or any portion thereof, is to be abandoned in the future, the permittee or successor shall abandon the project under direction of the Central Valley Flood Protection Board and Department of Water Resources, at the permittee's or successor's cost and expense.

FIFTY-TWO: The mitigation measures approved by the CEQA lead agency and the permittee are found in its Mitigation and Monitoring Reporting Program (MMRP) adopted by the CEQA lead agency. The permittee shall implement all such mitigation measures.

FIFTY-THREE: Within 120-days of completion of the project, the permittee shall submit to the Central Valley Flood Protection Board proposed revisions to the Corps of Engineers, Supplement to Standard Operation and Maintenance Manual, Lower San Joaquin River and Tributaries Project, Unit No.1, and any associated "as-built" drawings for system alterations to be approved that are incorporated into the federal Lower San Joaquin River and Tributaries Project.

FIFTY-FOUR: The permittee shall comply with all conditions set forth in the letter from The Department of the Army dated October XX, 2010, which is attached to this permit as Exhibit A and is incorporated by reference.

FIFTY-FIVE: The permittee shall accept the Local Project Cooperation Agreement, which is attached to this permit as Exhibit B and will be incorporated by reference, when fully executed.

Exhibit A

Army Corps Comment Letter



NOMELLINI, GRILLI & McDANIEL PROFESSIONAL LAW CORPORATIONS

DANTE JOHN NOMELLINI DAVID L. GRILLI DANIEL A. McDANIEL DANTE JOHN NOMELLINI, JR. 235 East Weber Avenue (95202)
P. O. Box 1461
Stockton, California 95201-1461
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Email: dantejr@pacbell.net

August 31, 2010

TO: Attn: Jeff H. Van Gilder Department of Water Resources Levee Repairs Branch 3464 El Camino Ave., Suite 200 Sacramento, CA 95821-6310

COMMENTS:

Jeff,

Enclosed please find the original copy of the LPCA (i.e., "O&M Agmt"), executed by RD 404, for the River Mile 42.3, approx. 1200 foot, Slurry Wall.

Thanks,
Dan Jr.
Secretary and Attorney for RD 404

From: Dante John Nomellini, Jr. ("Dan Jr.")

LOCAL PROJECT COOPERATION AGREEMENT BETWEEN THE CENTRAL VALLEY FLOOD PROTECTION BOARD OF THE STATE OF CALIFORNIA AND RECLAMATION DISTRICT 404 FOR THE SAN JOAQUIN RIVER FLOOD CONTROL PROJECT

This Local Project	t Cooperation Agreement (LPCA) is entered into by and between the	е	
Central Valley Flood Protection Board (Board) and Reclamation District 404 (RD 404) on this			
day of	, 2010:		

WITNESSETH, THAT:

WHEREAS, the San Joaquin River Flood Control Project was authorized by the Flood Control Act of December 22, 1944, and governed by the local assurances as authorized and approved by the State of California; and

WHEREAS, the Department of Water Resources (DWR) will implement the repair of levee erosion sites under the Levee Stability Project, San Joaquin River Flood Control Project (SJRFCP) pursuant to its authority under Proposition 1E, Public Resources Code section 5096.821; and

WHEREAS, the Standard Operation and Maintenance Manual for the Lower San Joaquin River and Tributaries Project prepared by the United States Army Corps of Engineers (USACE) dated April 1959, and supplements thereof, detail Local Cooperation terms and policies and contain the current local responsibilities for the levee; and

WHEREAS, Water Code Section 12642 states that in all cases where the Federal Government does not maintain and operate projects, it is the responsibility and duty of the county, city, state agency, or public district affected to maintain and operate flood control and other works, after completion, and hold and save the state and the United States free from damages; and

WHEREAS, the Central Valley Flood Protection Board has approved issuance of an encroachment permit for the Project at issue herein on the condition that RD 404 provides DWR and the Central Valley Flood Protection Board with the assurances specified in this agreement that it will be responsible for operation and maintenance of the Project upon its completion; and will, as described below, hold and save the federal Government, State, and Board, their representatives, officers, directors, employees, and other persons acting in their capacity on behalf of the Board and the State, as well as their successors and assigns, free and harmless from any and all claims and damages arising from the construction, operation, and maintenance of the Project; and

WHEREAS, the Board's obligations as nonfederal sponsor of the San Joaquin River Flood Control Project are set forth in the assurances authorized by the Board on December 21, 1955 for this Project and approved and accepted by the USACE on January 6, 1956.

936582.1

WHEREAS, RD 404 has agreed to provide the aforementioned assurances specified in this Agreement to DWR and the Board; and RD 404 has the authority to fulfill its obligations in this Agreement to DWR and the Board.

NOW, THEREFORE, IT IS HEREBY AGREED:

SECTION I: Obligations of the Board and RD 404

- A. For purposes of this Agreement, the term "Project" shall mean levee repair and mitigation work performed by DWR or the federal government at locations covered by the RD 404 jurisdiction area, and initiated in 2010, as set forth in plans entitled " Levee Stability Project, San Joaquin Flood Protection Project, San Joaquin River Mile 42.3R, seepage".
- B. The terms of this Agreement shall apply to all of the separate construction and mitigation contracts that may be awarded by DWR or the federal government for this Project.
- C. RD 404 agrees to the following:
 - To operate and maintain the Project, including, without limitation, slope protection features, berms, plantings, embedded woody material, and related features constructed as part of the Project in accordance with the maintenance manuals referenced in Section II.A of this Agreement and in accordance with Section II below. The duties of RD 404 to operate and maintain all Project features shall be performed in a manner that does not diminish the flood protection afforded by or jeopardize the structural integrity of the Project.
 - 2. RD 404 shall hold and save DWR and the Board, and their representatives, officers, directors, employees, and other persons acting in their capacity on behalf of the Board and DWR, as well as their successors and assigns, free and harmless from any and all claims and damages arising out of or in connection with the construction, operation or maintenance of the Project, excepting, to the extent permitted by law, only such claims and damages caused by the sole negligence or willful misconduct of DWR or its contractors during the construction of the Project.
 - 3. RD 404 shall hold and save DWR and the Board, and their representatives, officers, directors, employees, and other persons acting in their capacity on behalf of the Board and DWR, as well as their successors and assigns, free and harmless from any and all claims or damages arising out of or in connection with the obligations herein assumed by RD 404, including any responsibility for claims or damages arising out of work performed by DWR or the Board for which DWR, the Board or the federal government may be held liable, excepting, to the extent permitted by law, only such claims and damages caused by the sole negligence or willful misconduct of DWR or its contractors during the construction of the Project.

- 4. RD 404 shall hold and save the federal government, its representatives, officers, directors, employees, and other persons acting in their capacity on behalf of the federal government, as well as its successors and assigns, free and harmless from any and all claims and damages due to the construction, operation or maintenance of the Project, except for claims or damages due to the fault or negligence of the federal government or its contractors.
- D. RD 404 shall inform landowners and other affected interests of the extent of protection afforded by the Project, using data provided by the Board, not less than once each year, if so requested in writing by the Board.
- E. Except as provided in Section II.E. below, RD 404 agrees to mitigate, as required by law, for any environmental impacts of work performed by RD 404 pursuant to Section I.C.1 of this Agreement without any costs to DWR or the Board.

SECTION II: Obligations to Operate and Maintain

A. Upon completion of the Project or any functional portion thereof as determined by DWR or the federal government, the Board or DWR shall turn the completed Project or functional portion thereof, including the responsibility for all required lands and rights acquired by or on behalf of the Board, over to RD 404 and RD 404 hereby accepts responsibility for the completed Project or functional portion thereof as provided herein. RD 404 further accepts responsibility for operation and maintenance of the completed Project or functional portion thereof as required by Water Code sections 12642, and 12828 and Section I.C. of this Agreement.

DWR or the federal government has agreed that when it turns over this Project to the Board, it will be accompanied by (1) the Standard Operation and Maintenance Manual for the Project and (2) any applicable Supplements to the Standard Operation and Maintenance Manual. The Board shall provide the manual and any supplements to RD 404.

- B. RD 404 hereby gives the federal government and DWR or the Board the right to enter, at reasonable times and in a reasonable manner, upon land which it owns or controls for access to the Project for the purpose of: (i) constructing the repairs under the Project; (ii) performing any of their other obligations under this Agreement; (iii) conducting subsequent inspections to verify that RD 404 is complying with its obligations under this Agreement; and (iv) operating, maintaining, repairing, replacing, or rehabilitating any part of the Project.
- C. If RD 404 has failed or refused to perform the obligations set forth in this Agreement and that failure or refusal constitutes, in the opinion of the federal government, DWR or the Board, a threat to the continued ability of that functional portion of the Project to perform in a manner necessary to provide its designed level of flood protection or if RD 404 fails

or refuses to meet its obligations pursuant to this Agreement or the requirements of the manuals mentioned above, then DWR or the Board or the federal government may perform the necessary work either with their own forces or by contract. RD 404 will reimburse DWR or the Board or the federal government for the costs of performing that work.

D. Mitigation features shall be constructed on site by DWR's contractor as directed by DWR to meet the mitigation requirements approved for the Project by the Board and DWR. The mitigation features will be considered to be functional portions(s) of the Project. The specific requirements of initial plants establishment and mitigation monitoring are specified by DWR and/or the Board in accordance with the standards and guidelines set forth in the environmental permits and environmental documents adopted for the Project.

DWR's contractor is required to perform at least three years of maintenance of the mitigation features, which includes irrigation, weed control, and plant replacement, prior to acceptance of the work by DWR. Once DWR has accepted the work from the contractor, DWR will turn the Project over the Board and the Board will, in turn, turn the Project over to RD 404. When the Project is turned over to RD 404, all mitigation plantings shall be fully established and shall no longer require irrigation, weed control or plant replacement, and all mitigation monitoring requirements shall be fully satisfied, including mitigation performance standards and remedial measures set forth in the environmental permits and environmental documents adopted for the Project and the operation and maintenance manuals referenced in Section II.A of this Agreement. Prior to and after acceptance by RD 404, RD 404 shall be responsible for complying with the operation and maintenance manuals referenced in Section II.A of this Agreement and, to the extent not inconsistent with those manuals, shall perform levee operation and maintenance activities in a manner that minimizes any potential damage to the mitigation area and minimizes any interference with DWR's or DWR's contractor's construction and maintenance of the mitigation area. In addition, prior to and after acceptance by RD 404, RD 404 shall control any levee burning which it initiates so that it does not burn the mitigation plantings, and strive in good faith to control any uninitiated levee burning that it becomes aware of so that it does not burn the mitigation plantings.

E. In the event that vegetation is partially or completely damaged or removed by RD 404 in the course of carrying out its obligations under this Agreement, then as otherwise required by law, RD 404 shall mitigate for the affected vegetation in accordance with State and federal laws and without cost to DWR or the Board. This subparagraph E is not applicable to any partial or complete removal of the vegetation that is necessary to bring the vegetation in conformance with the specifications set forth in the operation and maintenance manuals referenced in Section II.A if ordered to do so by the Corps, the Board or DWR.

SECTION III: Disputes

Before any party to the Agreement may bring suit in any court concerning an issue relating to this Agreement, that party must first seek in good faith to resolve the issue through

negotiation or other forms of nonbinding alternative dispute resolution mutually acceptable to all parties.

SECTION IV: Compliance with State and Federal Law

In carrying out the provisions of this Agreement, RD 404 agrees to comply with all applicable federal and state laws and regulations, including Section 601 of Title VI of 55000.11 issued pursuant thereto and published in Part 300 of Title 32, Code of Federal Regulations; and Army Regulation 600-7, entitled "Non-Discrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army."

SECTION V: Obligation of Future Appropriations

The parties agree that nothing herein shall constitute, or be deemed to constitute, an obligation of future appropriations by the Legislature of the State of California.

SECTION VI: Hazardous Substances

RD 404 acknowledges that DWR or the Board may incur obligations with respect to hazardous substances regulated under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 USC Sections 9601-9675; California Hazardous Substances Account Act, Calif. Health & Safety Code sections 25310 et seq. or other statutes or regulations (collectively referred to as "state and federal Hazardous Substances Laws") on lands necessary for Project construction, operation, and maintenance. RD 404 agrees:

- A. That in the event that the federal government, DWR, the Board or RD 404 discovers through an environmental investigation or other means that any lands, easements, or rights of way that have been acquired or provided for the Project contain hazardous substances regulated under CERCLA and/or other state and federal Hazardous Substances Laws at levels requiring a response under those laws, the federal government, DWR, the Board or RD 404 shall promptly notify each other of that discovery.
- B. That in the event hazardous substances regulated under CERCLA and/or other state and federal Hazardous Substances Laws have been found at levels requiring a response under those laws upon lands, easements, or rights of way acquired or provided for the Project by DWR or the Board, then in conjunction with the Board's obligation under the cooperation agreement that it has executed with the USACE on behalf of the federal government, the federal government, the Board, DWR and RD 404 shall determine whether to initiate construction of the Project, or if already in construction, whether to continue with the construction of the Project, or to terminate construction of the Project for the convenience of the federal government, the Board, DWR and RD 404. Should the federal government, DWR, the Board and RD 404 all determine to proceed or continue with the construction after considering any liability that may arise under CERCLA, RD 404 shall be responsible, as between the Board, DWR and RD 404, for any and all necessary clean up and response costs, to include the costs of any studies and investigations necessary to determine an appropriate response to the contamination. Such costs shall not be considered a part of the Project as defined in

this agreement. In the event the federal government, the Board, DWR and RD 404 all elect to proceed with the construction, but RD 404 fails to provide any funds it has agreed to pay and which are necessary to pay for clean up and response costs or to otherwise discharge its obligation under this paragraph, the federal government and DWR may terminate or suspend work on the Project.

- C. In the event that the federal government, the Board, DWR and RD 404 all elect to continue with construction of the project, RD 404 shall consult with DWR and the Board; and then the State and the Board shall consult with the federal government in order to ensure that responsible persons under CERCLA and/or other state and federal Hazardous Substances Laws ultimately bear all necessary response and cleanup costs as defined in CERCLA and/or other state and federal Hazardous Substances Laws.
- D. That RD 404 shall operate and maintain the Project in a manner that will control the intentional or negligent release or threatened release of hazardous substances regulated under CERCLA and/or other state and federal Hazardous Substances Laws on lands necessary for Project construction, operation, or maintenance.
- E. That in the event that the federal government, DWR or Board, or their representatives, officers, directors, employees, and other persons acting in their capacity on behalf of the federal government, DWR, or Board, as well as their successors and assigns, are found to be liable under CERCLA and/or other state and federal Hazardous Substances Laws for the release or threatened release of hazardous substances arising out of the construction, operation or maintenance of the Project, then RD 404 shall indemnify the federal government, DWR, and Board, their representatives, officers, directors, employees, and other persons acting in their capacity on behalf of the federal government, DWR, or Board, as well as their successors and assigns, for any response or cleanup costs for which the federal government, DWR, or Board, their representatives, officers, directors, employees, and other persons acting in their capacity on behalf of the federal government, DWR, or Board, as well as their successors and assigns, are found to be liable under CERCLA and/or other state and federal Hazardous Substances Laws, except, to the extent permitted by law, RD 404 shall not indemnify said parties for such response or cleanup costs which result from negligence of the federal government or DWR or their contractors during construction.
- F. No decision made or action taken pursuant to any provision of this Section of the Agreement shall relieve any responsible person from any liability that may arise under CERCLA and/or other state and federal Hazardous Substances Laws, nor shall such decision or action be considered a waiver by DWR or the Board or RD 404 of any right to seek from any responsible person as defined by CERCLA and/or other state and federal Hazardous Substances Laws the recovery, contribution of, or indemnification from costs incurred by the State or the Board or RD 404 for response or cleanup activity required under CERCLA and/or other state and federal Hazardous Substances Laws, nor shall such decision or action be considered a waiver by DWR or the Board of any other right or remedy provided by law.

G. As between RD 404 and DWR or the Board, RD 404 shall be considered the operator of the Project for purposes of liability under CERCLA and/or other state and federal Hazardous Substances Laws.

SECTION VII: Authorization for Delegation or Subcontracting

RD 404 may delegate or subcontract its responsibilities under this Agreement to another public agency or firm. However, in performing the obligations called for in this Agreement, RD 404 shall notify DWR and the Board if it retains, employs, or uses any such public agencies or firms. RD 404 shall be responsible for all work to be performed under the contract, including any delegated work. DWR or the Board shall have the right to ask that any services for this Agreement provided by any subcontractor be terminated if its performance is unsatisfactory.

Payment for services rendered by subcontractors shall be made entirely by RD 404; neither DWR nor the Board shall have any responsibility for making any payments to the subcontractors for any services they may render in connection with this Agreement.

SECTION VIII: Amendment

This Agreement may be amended only upon consent of all parties.

SECTION IX: Notices

All notices, requests, demands, and other communications required or permitted to be given under this Agreement shall be deemed to have been duly given if in writing and delivered personally or mailed by first class (postage pre-paid), registered, or certified mail, as follows:

The Central Valley Flood Protection Board of the State of California P.O. Box 942836 Sacramento, CA 94236

Reclamation District No. 404 P.O. Box 1461 Stockton, CA 95201

A party may change the address to which such communications are to be directed by giving written notice to the other party in the manner provided in this section.

Any notice, request, demand, or other communication made pursuant to this section shall be deemed to have been received by the addressee at such time as it is personally delivered or seven calendar days after it is mailed, as the case may be.

SECTION X: Severability

If any provision of this Agreement is held invalid or unenforceable by any court of final jurisdiction, it is the intent of the parties that all other provisions of this Agreement be construed to remain fully valid, enforceable, and binding on the parties.

936582.1

Attachment C

IN WITNESS WHEREOF, the parties hereto have executed this Agreement which will become effective upon the date it is signed on behalf of the Central Valley Flood Protection Board.

The Central Valley Flood Protection Board of the State of California	Reclamation District 404
By Jay Punia Executive Officer	By Gary E. Gentry President and Trustee
Date:	Date: 8/26/10
Approved as to Legal Form and Sufficiency:	Approved as to Legal Form and Sufficiency:
Nancy Finch	Dante John Nomellini, Jr.
Senior Staff Counsel	Secretary and Attorney

